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Expiration Date: December 02, 2018**COMPLIANCE IS MANDATORY**[Printable Format \(PDF\)](#)

Request Notification of Change (NASA Only)

Subject: NASA Environmental Management**Responsible Office: Environmental Management Division****1. POLICY**

a. Environmental management, a cross-cutting management strategy of the NASA Strategic Plan, supports NASA's missions, protects mission resources, and mitigates environmentally driven mission risks, while maintaining environmental stewardship of assets, controls over environmental responsibilities, and compliance with applicable legal and other requirements. In implementing these principles, NASA will:

- (1) Provide direct mission support by implementing environmental planning elements in the earliest stages of program and project planning.
- (2) Implement proactive measures to reduce NASA's exposure to environmental, institutional, programmatic, and operational risks.
- (3) Pursue environmental initiatives and objectives designed to restore, protect, and enhance mission resources.
- (4) Commit to prevention of pollution and continual improvement of the NASA environmental program.
- (5) Execute NASA's mission without compromising the planet's resources so that future generations can meet their needs. This NASA Policy Directive (NPD) has been issued to align with and incorporate by reference, 14 CFR §1216.1, Policy on Environmental Quality and Control.

b. Consistent with these principles, it is NASA policy to:

- (1) Endeavor to maintain compliance with all applicable requirements of Federal statutes, regulations, and Executive Orders (EO); State, local, or territorial environmental laws and regulations; and NASA's requirements and agreements with other agencies, industry, and organizations.
- (2) Incorporate environmental risk reduction and sustainable practices to the extent practicable throughout programs, projects, and activities, including planning, development, implementation, and operational phases to create and maintain conditions under which the mission, humans, and nature can exist in productive harmony, that permit fulfilling the social, economic, and other requirements of present and future generations of Americans. Aligning with EO 13423, Strengthening Federal Environmental, Energy, and Transportation Management, and EO 13514, Federal Leadership in Environmental, Energy, and Economic Performance; sustainable practices include, but are not limited to:
 - (a) Improvement of energy efficiency and reduction of energy consumption and greenhouse gas emissions;
 - (b) Use of renewable energy;
 - (c) Reduction in water consumption;
 - (d) Acquisition of environmentally preferable products and services, such as those that have recycled content, are energy-efficient, and are biobased;
 - (e) Reduction of the use and disposal of toxic and hazardous chemicals and materials;
 - (f) Waste-prevention and recycling programs;
 - (g) Construction and retro-commissioning of high-performance and sustainable buildings;

- (h) Efficient fleet-management programs;
- (i) Electronics stewardship;
- (j) Green engineering; and
- (k) Climate change adaptation and encroachment protection actions.

(3) Consider environmental factors throughout the life cycle of programs, projects, and activities (as defined in NPD 7120.4, NASA Engineering and Program/Project Management Policy, and related documents), including planning, development, execution, and disposition activities. Examples of environmental factors include consideration of environmental impacts as required by the National Environmental Policy Act; the National Historic Preservation Act; the proposed use of hazardous materials; the potential for waste generation; the need to acquire necessary permits, waivers, and authorizations; and the use of environmentally preferable materials and processes wherever practicable.

(4) When addressing environmental factors, include in the life-cycle analysis of costs, the potential environmental impacts of programmatic activities and the use of materials that may be affected by or phased out of production due to international and domestic environmental laws and regulations and their supporting institutional processes and costs of mitigating such impacts.

(5) Apply NASA's scientific expertise and products so that we can incorporate climate information into our decision making and planning; create innovative, sustainable, and flexible solutions; and share best practices; in order to create climate-resilient NASA Centers.

(6) Foster and actively support environmentally related technology transfers through domestic, international, and commercial collaborative partnerships.

(7) Actively communicate, coordinate, and cooperate with Federal, state, local regulatory agencies, international entities, and governmental/nongovernmental and commercial organizations to develop collaborative partnerships; leverage available and shared resources; improve materials and processes; identify, help develop, and comply with environmental requirements; prevent pollution; reduce waste generation; manage cultural and natural resources; and establish other goals and objectives in the most effective manner possible.

(8) Maintain an environmental management system, as implemented by NASA Procedural Requirements (NPR) 8553.1, NASA Environmental Management System, at all appropriate organizational levels. The environmental management system will establish priority environmental aspects and impacts resulting from its activities, products, and services; provide a framework for setting and reviewing environmental objectives and targets; and establish processes for communication of environmental aspects with persons working for or on behalf of NASA and the public. The environmental management system shall be used as a tool to address all environmental aspects of internal NASA operations and activities.

(9) Ensure that environmental liabilities and compliance are addressed appropriately within Space Act Agreements, tenant, customer, or similar arrangements. Ensure that hazardous waste generated solely by onsite non- NASA organizations/agencies (e.g., tenants, customers) are manifested and disposed of using the non-NASA organization's/agency's Environmental Protection Agency identification number (EPA ID), as required by regulation. Although these organizations/agencies may choose to independently use the same companies under contract to NASA for disposal of hazardous wastes, NASA EPA ID numbers shall not be used for the disposal of non-NASA hazardous wastes, unless waived by the appropriate authority.

2. APPLICABILITY

a. This NPD is applicable to NASA Headquarters and NASA Centers, including Component Facilities and Technical and Service Support Centers.

b. This language applies to the Jet Propulsion Laboratory, a Federally Funded Research and Development Center, other contractors, or parties to agreements only to the extent specified or referenced in the appropriate contracts, grants, or agreements.

c. In this directive, all mandatory actions (i.e., requirements) are denoted by statements containing the term "shall." The terms "may" or "can" denote discretionary privilege or permission, "should" denotes a good practice and is recommended, but not required, "will" denotes expected outcome, and "are/is" denotes descriptive material.

d. In this directive, all document citations are assumed to be the latest version unless otherwise noted.

3. AUTHORITY

a. National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470, et seq.

- b. National Environmental Policy Act of 1969, as amended, 42 U.S.C. 4321, et seq.
- c. National Energy Conservation Policy Act, as amended, 42 U.S.C. 8251, et seq.
- d. National Aeronautics and Space Act, as amended, 51 U.S.C. § 20113 (a).

4. APPLICABLE DOCUMENTS AND FORMS

- a. Preserve America, EO 13287, 68 Federal Register 10635 (March 5, 2003).
- b. Strengthening Federal Environmental, Energy, and Transportation Management, EO 13423, 48 CFR § 970.5223-6 (2011).
- c. Federal Leadership in Environmental, Energy, and Economic Performance, EO 13514, 74 Federal Register 52117 (October 8, 2009).
- d. Instructions for Implementing Executive Order 13423, 72 Federal Register 33504 (June 18, 2007), http://www.whitehouse.gov/sites/default/files/omb/procurement/green/eo13423_instructions.pdf.
- e. Environmental Quality, 14 CFR Part 1216.
- f. NPD 7120.4, NASA Engineering and Program/Project Management Policy.
- g. NPR 8510.1, NASA Cultural Resources Management.
- h. NPR 8553.1, NASA Environmental Management System.
- i. NPR 8580.1, Implementing the National Environmental Policy Act and Executive Order 12114.

5. RESPONSIBILITY

- a. Every NASA employee is responsible for:
 - (1) Complying with environmental regulations and NASA policy related to official duties.
 - (2) Helping achieve environmental objectives and targets applicable to their organizational level.
- b. Each NASA organizational element is responsible for:
 - (1) Incorporating this environmental policy into the earliest stages of program and project planning, budgeting, and implementation.
 - (2) Allocating and maintaining appropriate levels of authority and funding.
 - (3) Ensuring appropriate training is available and provided.
 - (4) Overseeing environmental requirements applicable to process and material selection.
 - (5) Incorporating sustainable practices in its missions and activities.
- c. The Assistant Administrator for Strategic Infrastructure is responsible for NASA Environmental Management and shall:
 - (1) In cooperation with and in support of the Mission Directorates, Mission Support Offices, and NASA Centers and Component Facilities, advocate for, support, manage, allocate, and assign environmental resources, as defined and budgeted by the Agency, including applicable financial accounting and reporting responsibilities.
 - (2) Serve as the NASA senior official for external Agency-level interfaces on domestic environmental matters in accordance with EO 13423 and support the Office of International and Interagency Relations and the Office of the General Counsel on international environmental matters.
 - (3) Serve as, or designate a NASA official to serve as, coordinator for NASA's National Environmental Policy Act implementation, in accordance with 14 CFR Part 1216, Environmental Quality, and NPR 8580.1.
 - (4) Designate the Senior Policy Official and Federal Preservation Officer, in accordance with the National Historic Preservation Act and EO 13287, to accomplish their responsibilities in NPR 8510.1.
 - (5) Designate the Agency Energy Manager and the NASA member of the Interagency Energy Management Task Force established in the National Energy Conservation Policy Act.
 - (6) Serve on NASA advisory boards and panels in accordance with their charters.
- d. The Director, Environmental Management Division shall:

- (1) Develop, maintain, and execute the Agency's environmental management strategy, policy and guidance, and environmental risk management program.
- (2) Establish requirements for the use of the NASA environmental management system, including guidance for Centers to identify and prioritize environmental aspects, impacts, risks, objectives, and targets. Periodically review its status at Headquarters and across the Agency and report significant issues to senior Agency officials.
- (3) Provide functional oversight and conduct functional reviews to ensure that environmental activities are conducted in accordance with statutory, regulatory, and financial accounting and reporting requirements. Functional review results shall be reported to Center Directors and appropriate Agency officials when Agency-wide issues, problems, successes, and opportunities are involved.
- (4) Provide technical advice, assistance, and consultation to responsible managers of the Mission Directorates, Mission Support Offices, and NASA Centers and Component Facilities based on overall awareness and insight of Agency program execution and national and international requirements.
- (5) Ensure the appropriate coordination and approval of Principal Centers to lead or oversee designated environmental initiatives or activities.
- (6) Advocate for, and support effective development and execution of, environmental and energy conservation training, to include professional development and education initiatives that promote the knowledge and proficiency of the NASA workforce for understanding the requirements, concepts, and techniques of environmental management and sustainable practices.
- (7) Serve as the approval authority for waiver requests regarding non- NASA-generated hazardous wastes (section 1.b(9), above).

e. Associate Administrators, Assistant Administrators, Chiefs, Directors of Mission Directorates and Mission Support Offices, and program and project managers are responsible for:

- (1) Implementing environmental policies and requirements within existing missions, programs, projects, and activities, including life-cycle planning, development, execution, and disposition activities.
- (2) Ensuring that requirements of the National Environmental Policy Act are satisfied for any proposed new or modified missions, programs, projects, and activities.
- (3) Coordinating with the affected Center environmental managers on both existing and new missions, programs, projects, and activities to ensure compliance with law, awareness of emerging laws and regulations, and the effective implementation of environmental requirements.

f. Center Directors are responsible for:

- (1) Ensuring that the Center and each Component Facility under their scope of responsibility have an appointed environmental manager with the authority to accomplish the responsibilities of section 5.g, below.
- (2) Ensuring that the Center and each Component Facility under their management scope of responsibility have appointed energy and water manager (s) with the authority to accomplish their responsibilities in NPR 8570.1, NASA Energy Management Program.
- (3) Providing sufficient qualified staff and other required resources to perform environmental compliance, energy and water conservation activities, maintain the environmental management system, and implement sustainability practices.
- (4) Ensuring implementation of Agency environmental management functional leadership activities, policies, regulations, and procedural requirements.
- (5) Providing support and oversight of the environmental, energy, and water management programs, including the environmental management system.
- (6) Ensuring effective development and execution of environmental management training, including professional development and education initiatives that promote the knowledge and proficiency of the NASA workforce in environmental management concepts and techniques.
- (7) In collaboration with the NASA Headquarters Office of Strategic Infrastructure, establishing oversight and evaluating Center operations through functional reviews, performance metrics, or other means to ascertain that appropriate environmental compliance and management techniques are used for the identification, documentation, evaluation, and disposition of all environmental requirements for programs, projects, facilities, systems, and operations. This includes responding to environmental and energy data calls from Headquarters.
- (8) Supporting effective environmental communication within the Center and with the interested community.

g. Center and Component Facility environmental managers are responsible for the following:

- (1) Coordinating with all internal organizations to ensure compliance with the law and effective implementation of environmental policies, procedures, and processes to reduce risk to mission.
- (2) Advocating, managing, and allocating assigned environmental program resources, both for the Environmental Compliance and Restoration Program and programs supported by Center resources and direct reimbursements.
- (3) Serving as the local source of expertise on environmental policies, procedures, requirements, and processes.
- (4) Supporting functional reviews, as necessary, to ensure that Center programs, projects, facilities, systems, and operations comply with all environmental requirements.
- (5) Serving on NASA advisory boards, panels, and working groups in accordance with their charters as coordinated and approved by local and Headquarters Senior Management.
- (6) Reporting information regarding environmental management activities to the Assistant Administrator for Strategic Infrastructure or the designee.

6. DELEGATION OF AUTHORITY

None.

7. MEASUREMENTS

The majority of environmental and energy regulations include specific requirements to assess compliance. These requirements are monitored by external regulatory agencies and through Headquarters environmental functional reviews to ensure compliance with requirements of the relevant laws. NASA's internal metrics for environmental management cover compliance, restoration, and conservation measures to meet reporting requirements of the Office of Management and Budget and other external oversight agencies.

8. CANCELLATION

- a. NPD 8500.1B, NASA Environmental Management, dated December 20, 2007.
 - b. NID 8500-81, NASA Interim Directive (NID) on Tenant-Generated Hazardous Waste, dated November 26, 2012.
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/s/ Charles F. Bolden, Jr.
Administrator

ATTACHMENT A: Definitions

[Space Reserved]

ATTACHMENT B: Acronyms

EPA ID Environmental Protection Agency Identification Number
NPD NASA Policy Directive
NPR NASA Procedural Requirements

ATTACHMENT C: References

- a. NPD 1001.0, NASA Strategic Plan.
- b. NPR 8570.1, NASA Energy Management Program.

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